



STATE OF ALABAMA DEPARTMENT OF  
**PUBLIC HEALTH**

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Bureau of Communicable Disease, Epidemiology Division (334/206-5971)  
Attention: Laboratory Director and Infection Preventionist

Call to Submit *H. influenzae* Isolates for Serotyping

It has been one year since the recommendation for deferring the booster dose of *Haemophilus influenzae* type b (Hib) vaccine was first issued. The shortage of Hib conjugate vaccine will likely continue until mid-2009, as announced by Merck, according to the Centers for Disease Control and Prevention (CDC) in their November 21, 2008, issue of the MMWR.<sup>1</sup> The CDC continues to recommend healthcare providers defer the final dose of Hib vaccine for all children, except those at increased risk for invasive *H. influenzae* disease.

During this time of decreased vaccine availability and suspension of Hib booster doses, it is critical that all isolates of *H. influenzae* from sterile sites are serotyped in order to detect any increased incidence of Hib disease, especially if the patient is less than fifteen years of age. When serotype information is known, public health staff is able to initiate control measures and notify contacts if the individual has type b, which is vaccine-preventable. The Bureau of Clinical Laboratories (BCL) provides serotype testing free of charge to healthcare providers and laboratories. All providers and laboratories are encouraged to submit their *H. influenzae* specimens to the BCL. If a result of *H. influenzae* is received for one of your patients, please contact the laboratory providing the test result to ensure the isolate has been sent for serotyping. Contact the BCL Microbiology Division at (334)260-3400 or (334)260-3481 for assistance submitting the isolate.

Public Health staff is closely assessing the incidence of Hib disease. Three confirmed cases of Hib disease have occurred in Alabama in 2008, as of February 2, 2009. Only one of the cases was a child less than five years of age; the onset of disease came at less than two months of age, before the recommended age for the first dose of Hib vaccine. During the five-year period 2003-2007, only one case of Hib disease was reported in Alabama; it occurred in 2007. Unfortunately, only half of the isolates of invasive *H. influenzae* were tested to identify the serotype. Prior to the Hib vaccine era, type b accounted for 95% of invasive *H. influenzae* cases.<sup>2</sup> Therefore, it is essential to know the serotypes in order to recognize and prevent further spread of Hib disease where possible. Conditions caused by invasive *H. influenzae* include pneumonia, meningitis, epiglottitis, septic arthritis, cellulitis, otitis media, and bacteremia. The case-fatality rate can be as high as 5%. Reporting serotype information helps public health officials monitor the incidence of the vaccine-preventable *H. influenzae*, as well as the other serotypes, causing invasive disease.

<sup>1</sup> CDC. Continued Shortage of *Haemophilus influenzae* Type b (Hib) Conjugate Vaccines and Potential Implications for Hib Surveillance --- United States, 2008. MMWR 2008; 57(46); 1252-1255.

<sup>2</sup> CDC. Epidemiology and Prevention of Vaccine-Preventable Diseases (The Pink Book), 10th Edition. *Haemophilus influenzae* type b. Chpt. 9, pp 115-28.